OCTOBER
NOVEMBER
1939

PHOTO SPOTLIGHT

PUBLISHED BY
EASTMAN KODAK STORES, INC.
MADISON AVE. AT 45TH ST., 235 W. 23RD ST., NEW YORK, N. Y.

Built for Stability **AND CONVENIENCE**

THE Eastman Commercial Tripod Stand is not only strong, sturdy, and rigid but has a wide range of adjustments. It may be raised from 3 feet 4½ inches to 7 feet 4 inches. Its aluminum top, 10 x 13 inches, is mounted on a ball-and-socket joint which permits tilting the camera at any angle. Vise-handle tighteners assure rigid locking of all adjustments. The entire stand weighs only 31¾ pounds and is priced at $45—See it at your dealer's.

EASTMAN KODAK COMPANY, Rochester, N. Y.

Eastman Graduates

EASTMAN ENGRAVED GRADUATE (1)

MADE of the best quality glass with carefully engraved markings. Has pedestal base, easy to grasp. See No. 1 in illustration.

1 dram	1 oz.	2 oz.	4 oz.	8 oz.	16 oz.	32 oz.
$.65	$.60	$.65	$.80	$1.20	$1.60	$2.50

EASTMAN VISIBLE GRADUATE (2)

A STRONG and accurately molded graduate, with a pedestal base, and opaque graduations easily read under darkroom light. See No. 2 in illustration.

2 oz.	4 oz.	8 oz.	16 oz.	32 oz.
$.60	$.70	$.80	$1.10	$1.50

EASTKO MOLDED TUMBLER GRADUATE (3)

INEXPENSIVE but reliable. Shaped like a water glass with lip for pouring. Molded graduations and figures. See No. 3 in illustration.

2 oz.	4 oz.	8 oz.	16 oz.	32 oz.
$.20	$.25	$.30	$.55	$.85

EASTMAN MEASURING JUG (4)

MADE of strong, clear glass, with molded graduations as follows: 4, 8, 12, 16, 20, 24, 28, and 32 ounces; also graduated for ½ pint, 1 pint, and 1 quart. The removable top, when inverted, may be used as a funnel. See No. 4 — — $1.50

EASTMAN KODAK STORES

NEGATIVE ON EASTMAN
PORTRAIT PANCHROMATIC FILM

DEVOTED TO THE INTERESTS OF
PROFESSIONAL PHOTOGRAPHERS
VOLUME XVIII • NUMBER 2
OCT.—NOV., 1939

LENS DEFINITION AT VARIOUS APERTURES

IT is common practice in both commercial and portrait photography to stop down a lens to obtain greater depth of field, and in some cases to reduce the speed of the lens. A great many photographers, however, have an idea that the smaller the aperture the better the definition. This is not altogether true.

Decreasing the aperture from wide open generally improves definition slightly, and removes a slight haze which is caused by residual spherical aberration. This haze disappears for an aperture decrease of one full stop or less and a slight increase in image contrast results. Definition, generally, improves in the center of the picture for the first full stop decrease, but remains unchanged by further decrease until *f*/16 is reached.

Definition away from the center is slightly improved by decreasing the aperture further to about two stops from the maximum. Usually there is little change by further reducing the aperture except for a continued gain in depth of field. However, when *f*/16 is reached, a slight decrease in definition sets in due to the wave nature of light.

From this it will be seen that it is quite reasonable and necessary to stop a lens down to obtain depth of field, by which is meant the range of distances in front of and behind the plane focused upon, within which objects are imaged with acceptable sharpness in the final print.

It is not necessary, or even desirable, however, to stop down a good lens more than one full stop for the sake of sharpness in the plane on which it is focused. The use of enlarger lenses at their smallest apertures may limit print definition in extreme enlargements, but not in ordinary work. The effects upon definition due to changes in aperture are much smaller than those due to slight errors in focusing, so they are almost negligible.

COPYING IS A PROFITABLE BUSINESS

IT is all very well for a photographer to be a specialist if there is enough work to be done in his specialty to keep the studio busy. It is a better plan, however, for the average photographer to have fill-in lines of work which can be promoted in what would ordinarily be a dull season.

Copies should be a very substantial and profitable part of every photographer's business, and therefore should be promoted in every possible way.

How often have you made a display of copies?

A photographer who has been successful in this line thinks that every third window display should be one of copies, showing enlargements in different treatments, with the originals from which they were made. Along with this display should be an attractive show card explaining that you are an expert in the copying of old and faded originals.

It would be especially appropriate at this time for you to get together a few old tintypes and daguerreotypes for your window display. This is the one hundredth anniversary of Daguerre's discovery of the first successful photographic process. A notice to this effect will make your copy display all the more interesting.

Preparation of Display Samples

It is not practical to use actual examples of work you have done for your customers for such a display. The better plan is to prepare your own samples. Copy an old tintype or daguerreotype, showing the original and your finished result. Do the same with an old albumen print that has become stained or yellowed with age. If you can't find an old stained print you can easily stain one. Then make a copy of one head out of a group, making an enlarged print from your negative, blocking out the other heads, and then making a nice vignetted print from your second negative. You must have some old photographs of your family, friends or relatives that you can use for this purpose.

You will be surprised to find how very enlightening such an exhibit can be. There are a lot of people who have very old pictures which, for sentimental reasons, are priceless to them. They do not know that you can make good copies of them. They have wondered about it but have neglected to ask. Your display, a little advertising, and solicitation will bring the desired results.

You can always take your time making copies, for it is very seldom that anyone is in a hurry about them. And your prices must necessarily be very elastic. You can hardly tell how much work you will have to do on a copy job until you have actually finished it.

If the print you must copy is in good condition, it is very simple, but when you have to make a negative, and an enlargement, or a large positive, which must be carefully retouched, and then a second negative from which you will make your final prints, you can readily see that the

work involved is considerable. You will seldom have any complaints, however, if the finished result is satisfactory.

There is another sales slant to the copy business that is worth considering. Your orders for copies will rarely be from pictures of people who are living, unless they are pictures of grown people, made when they were children, and that is seldom the case. They are usually pictures of people who neglected to have photographs made in the later years of their lives, and their children probably have only one old picture to be shared with the whole family. That is why they want that picture reproduced.

Possibilities for Current Business

You can't tell such people that *they* should not go through life without good portraits of themselves to hand down to posterity. They wouldn't like it. But you can ask them if they wouldn't like some new portraits of themselves or of the children. "Children change so rapidly, you know, and a new portrait of mother or father would be appreciated by the whole family." You can be sure that just the fact that they have had to have an old photograph copied will make them feel the importance of having good portraits of themselves.

It is a fact that some photographers dislike to make copies, just why we could never understand. It is probably because a copy only reproduces what someone else has created. But there is a lot of satisfaction in overcoming difficulties, improving upon the original, and pleasing the customer, which more often than not brings you other business.

The first thing to decide in making a copy is the negative material to use. If the original is rather contrasty, a Portrait Film will usually give the best result. If the original has normal contrast and is without stains or color, Eastman Commercial Film will probably give the best results. If this film does not give enough contrast—if the original is too soft or flat, do not hesitate to use Process Film.

How To Copy Stained Prints

If the print to be copied is stained or discolored in any manner, it should be photographed on a panchromatic film, using a filter of a color which will eliminate the stain. This must be a contrast filter. An orthochromatic filter will reproduce the stain as it actually appears to the eye. What is wanted is a filter of the same color but darker than the stain, which will completely eliminate it. If it is a light yellow stain the filter to use is a dark yellow filter. If it is a light red stain the filter should be a dark red filter. If the entire print image is a faded yellow, no filter should be used and the film should not be a panchromatic film.

Many old prints, brought to the photographer for copying, will be soiled by an accumulation of dust. Art gum will often be all that you need use to clean them. If this doesn't work, try a solution of half water and half alcohol.

If tintypes are badly scratched they may be flowed with a colorless mineral oil, but under no circumstances should the surface of a daguerreotype ever be touched. It is the most delicate of all photographic images, and the lightest touch of a finger tip will destroy it. If you should have occasion to copy a daguerreotype which is discolored, we will be glad to supply complete instructions on request.

Eastman Studio Printer

MODEL 12

SIMPLIFIES PRINTING PROBLEMS

THE Eastman Studio Printer Model 12 gives the utmost in printing convenience and efficiency. It has 3-inch wide adjustable metal masking strips which slide on a flush support, permitting the use of large paper sizes for white margin prints. The negative opening is 12 x 15 inches. The rubber-surfaced platen is synchronized with a mercury switch which can be locked to keep the light on for arranging vignettes. The single light source is reflected by a mirror which also acts as an exposure shutter. A lamp fixture carries three sockets, one for a 1,000-watt lamp and two for 500-, 250-, or 25-watt lamps, any one of which may be used for printing. A lever operates a diffusing ground glass, and an amber covered pilot light supplies constant illumination. The steel cabinet with side shelves is enameled battleship gray.

PRICES

Eastman Studio Printer Model 12, without lamps	$250.00*
1,000-watt T20 Mazda Lamp, Prefocused Base	5.75
500-watt T20 Mazda Lamp, Prefocused Base	2.60
250-watt T14 Mazda Lamp, Prefocused Base	2.25
25-watt T10 Mazda Lamp, Prefocused Base	.50

**Extended Payments if Desired or 10% Cash Discount*

EASTMAN KODAK STORES

PORTRAIT LIGHTING, MAKE-UP AND BACKGROUNDS FOR KODACHROME

IN portrait lighting the photographer who wishes to experiment with Kodachrome must be reminded that blue glass lamps cannot be used with Kodachrome Professional Film Type B. While the use of blue glass lamps is quite usual in black-and-white photography for modeling work, such lamps are unsuitable and cause a blue rendering of the face.

Clear glass (not blue glass) 3200° K lamps should be used altogether in the general lighting, modeling and any other necessary illumination in the studio. Any reflectors or diffusers used should also be white, not bluish or yellowish in color. Another important point is that the light must be studied very carefully, and arranged when possible to conceal defects which would otherwise have to be retouched out. This is essential, for retouching must be regarded as impractical for Kodachrome transparencies. Retouching can be done only in color printing or in reproduction from Kodachrome.

Make-Up

Head-and-shoulder portraits in color frequently show small skin defects to a more noticeable extent than black-and-white photographs do. For this reason it may be necessary to use some of the special photographic make-up materials, and to follow the advice of the manufacturers of such products. Make-up is not generally necessary in three-quarter or full-length portraits because the smaller heads do not show defects so readily.

Studio Background and Draperies

Backgrounds, drapes, and costumes assume a new importance in Kodachrome photography that would scarcely be given a thought in black-and-white work. It is very essential that one knows the effect of these accessories in making portraits in color. A colored background or drape, if close to the subject, reflects light of its own color onto the subject. Thus, an orange background may tinge the far side of the subject with an orange hue. Likewise, a colored drape, close to the subject but just out of the picture field, may cause a noticeable tint on one side of the subject.

To avoid such effects, backgrounds should be placed six or more feet behind the subject. This requires that the background be given individual lighting. The color in which the background appears in the picture depends greatly on the extent to which it is lighted. For example, a yellow background which has insufficient light on it may appear tan or even brown. If the background is to record

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in the way it appears to the eye, it must have the correct amount of illumination on it as related to the subject.

This strength of illumination can be determined readily with a photoelectric exposure meter. In any case, the brightness of the background should be within the contrast range of 4 to 1—that is, the brightness of the highlights should not be more than four times the brightness of the shadows. It is also important that colored backgrounds or drapes, other than those used in making the portrait, should be removed some distance from the subject.

The artistic effectiveness of the color of the background is also important. This involves the whole subject of color harmony. If the picture as a whole is to compel attention, the background can be in bright colors so long as it harmonizes with the subject. On the other hand, if the picture is not intended to have a publicity aspect, as in average studio portraiture, the background can be very definitely subdued, so that the subject, rather than the picture as a whole, attracts the eye.

It is also suggested that neutrals be avoided as backgrounds, as there is generally some color which, when used judiciously, is more effective artistically than a neutral. A further objection to neutral backgrounds is that colored reflections from the subject, or from drapes off the set, frequently tint the background in an undesirable manner.

Victor Studio Light No. 4

For Modeling and Highlighting

THIS modeling light is also very useful in commercial, illustrative and group photography.

Uses No. 4 Photoflood or 500-watt Mazda, and, with adapters supplied, No. 2 Photoflood and No. 75 Photoflash lamps.

Gives a powerful, semi-directional light which is very uniform over its effective area.

Instant and unlimited adjustment of direction of the efficient 16″ aluminum reflector is secured by its flexible neck. Deflector shields subjects from all direct light rays.

Height adjustment is from 3 to 9 feet. Stand and base are substantially constructed and mounted on easy acting casters. All parts are attractively and durably finished.

Price without deflector or lamp	$22.50
Deflector, extra	.65

Extended Payments if Desired or 10% *Cash Discount*

EASTMAN KODAK STORES

For the Retoucher

CENTURY FOLDING RETOUCHING FRAME

ACCOMMODATING negatives of any size up to 11 x 14, this frame consists of a wooden base equipped with rubber-tipped fingers which hold the negative firmly in place, and a light-excluding canvas hood. The angle of the negative platform is easily adjusted to the position most convenient to the worker.

Pockets in the canvas top afford an accessible holder for pencils and etching tools.

Price, $5.50

EASTMAN PENCILS

THE Eastman *Reducing* Pencil contains a soft abrasive. Reducing negatives is easily accomplished with it. Each, $.25.

The Eastman *Negative* Pencil is made especially for working on film surfaces, and the glass side of negatives. Each, $.15.

The Eastman *Photo* and *Sepia Spotting* Pencils are far more satisfactory than the old India ink method of spotting. Each, $.15.

ARTIST LEAD HOLDERS

Koh-I-Noor or Venus—Complete with 1 lead	$.50
Extra Leads, any grade, box of 6 Koh-I-Noor, $.55; Venus	.50
Castell—Complete with 1 lead	.60
Extra Leads, any grade, box of 6 Castell	.60

R. O. C. RETOUCHING DESK

THIS sturdy frame accommodates negatives up to 8 x 10 inches in size.

It consists of three adjustable platforms, the lower of which holds a pivoting mirror which reflects light on the ground glass from any angle and assures brilliantly lighted negatives.

The ground-glass negative table may be set at any angle and is provided with a sliding negative holder. Hinged to it is the third platform which acts as a light shield.

The price is $8.75

EASTMAN KODAK STORES

Shutters

ILEXPO

FITS front of studio cameras. Time and instantaneous speeds regulated by bulb pressure.

No.	Outside Dimensions	With Bulb and Tube
0	6 x 6	$20.00
1	9 x 9	20.00
2	10 x 10	22.00

ILEXPO FAST SPEED

HAS an extra fast speed for super-sensitive emulsions.

No. 1, $30.00 No. 2, $32.00

'LUC" BEFORE-THE-LENS

Dependable in construction and ideal for outdoor photography.

Time and instantaneous exposures by varying pressures on the release.

No.	Fits Lens Hood	Diaphragm Opening	Price
1	1 3/16 to 1 9/16	1 3/16	$10.35
2	1 9/16 to 1 3/4	1 3/8	11.70
3	1 3/4 to 2	1 9/16	12.70
4	2 to 2 3/16	1 3/4	14.00
5	2 3/16 to 2 9/16	2	14.70
6	2 9/16 to 3 1/8	2 3/8	17.00
7	3 1/8 to 3 9/16	2 3/4	18.35
8	3 9/16 to 3 15/16	3 1/8	20.00
9	3 15/16 to 4 5/16	3 9/16	24.00
10	4 5/16 to 5 1/8	3 15/16	27.35
11	5 1/8 to 6 1/8	4 1/2	33.35

PACKARD IDEAL SHUTTERS

NOISELESS and vibrationless shutters for view and studio cameras. Made in three styles.

No. 5—Designed for Time Exposures. Especially suitable for small front boards.

No. 6—For Time and Instantaneous Exposures.

It is changed from time to instantaneous by pushing in or pulling out a small pin. Works automatically.

Two-Way No. 8. Eliminates the instantaneous pin. Two pumps, operated with separate bulbs, allow immediate action for either time or instantaneous exposures.

No. 8

Opening Inches	Outside Dimensions	No. 5	No. 6	No. 8
1 1/2	3 1/4 in. sq.	$7.00	$8.50	.....
1 3/4	3 1/2 in. sq.	7.00	8.50	.....
2	4 in. sq.	7.00	9.00	.....
2 1/4	4 1/2 in. sq.	7.50	9.00	.....
2 1/2	4 3/4 in. sq.	8.25	9.00	$10.50
2 3/4	5 in. sq.	8.25	9.50	11.00
3	5 3/4 in. sq.	8.50	9.75	11.50

Opening Inches	Outside Dimensions	No. 5	No. 6	No. 8
3 1/4	6 in. sq.	$ 8.50	$ 9.75	$11.50
3 1/2	6 1/2 in. sq.	8.50	9.75	11.75
3 3/4	7 in. sq.	8.50	10.50	12.25
4	7 1/2 in. sq.	9.25	10.75	13.00
4 1/2	8 in. sq.	9.75	12.00	13.50
5	8 1/2 in. sq.	10.25	13.00	14.00

ESSENTIALS OF GOOD BUSINESS

ONE of the fundamental factors in determining the profits from a business is the amount of the investment necessary to conduct that business. If you were opening a new studio and found that it required an investment of $25,000, you could not expect the same profit that you could make if you were able to do an equal volume of business on an investment of $5,000.

You must consider interest on investment as one of your items of cost, for if you didn't have the money invested in your studio, you could have it out at interest, or invested in stocks or bonds that would yield a fair return.

Your investment, therefore, should never be unduly large. You must have all of the equipment necessary to work efficiently, and economically, but not a lot of idle equipment. If you have been able to equip your studio complete without borrowing, you may feel you have saved the interest you would have had to pay the bank on a loan. That sort of reasoning is altogether wrong. It doesn't matter whether you borrow from the bank, or from your own private funds, the item of interest on investment is a part of your costs in either case. If you don't figure it in costs you are cheating yourself.

Another important factor, which photographers may not always consider, is turnover. This affects investment, depreciation, and cash discounts, all of which have a direct bearing on profits. You may think that for an extra 5 per cent discount it is worthwhile to buy six months' or a year's supply of some material. But you should remember that when you buy for just a month at a time, you are getting your 2 per cent cash discount each month, and you are saving interest on the money your larger purchase has tied up. You are really losing money unless your quantity discount is large. And when it is large the reason for it may bear investigating.

If, for example, you bought a year's supply of everything you used, you would have just twelve times as great an investment as if your purchases were for a month's supply. Also, there is less chance for depreciation on monthly purchases. Chemicals bought in large quantities may deteriorate—mounts and frames may change in style or become shopworn.

One of the main advantages of purchases for a month's needs is that, with a small amount of surplus, you can always pay your bills and take your 2 per cent cash discount. Just bear in mind that in a year's time that 2 per cent is equal to 24 per cent on an average month's purchases, and 24 per cent discount is not to be ignored.

Don't be unfair to your dealer however, and expect him to allow you a cash discount when you let bills slide past the 10th of the month following purchases. He also has bills to meet and that 2 per cent he offers you is for promptness. If you pay your bills promptly he can pay his bills promptly. If he must carry your account past the discount date, he

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hasn't the cash to use, and of course you haven't earned the discount. If everyone let his bills slide your dealer would have a lot of money tied up in frozen accounts and would have to obtain working capital from some other source, and at a cost which would more than cancel your 2 per cent cash discount.

To recapitulate, equip your studio for the greatest possible efficiency and convenience. Be sure that interest on investment and depreciation are included in your costs. Buy in small quantities for frequent turnover of your stock of materials and merchandise, and last but not least, always pay your bills in time to take your cash discount.

If you do all of these things, make good photographs, and price them to make a fair profit, you are a good business man as well as photographer, and should be successful.

WRATTEN TRICOLOR FILTERS

WRATTEN TRICOLOR FILTERS, A, B, and C5, as currently listed, are for making color separation negatives direct from the object.

When making color separation negatives from Kodachrome Transparencies, a set of Wratten Tricolor Filters 29, 49, and 61 is recommended.

Each of these sets carries the following prices:

Wratten Tricolor Filters

Gelatin Film—

2-inch	$ 1.00
3-inch	2.25

Cemented in "B" Glass*

2-inch	11.50
3-inch	16.50
4-inch	25.50

*Prices include the matching and the leather case.

Advertising Display Suggestion

IT'S none too early to shop for that most personal of all gifts — your photograph.

A sitting now will solve some of your most trying gift problems, and solve them economically, too.

THE HYLAND STUDIO

PORTRAIT..."AT WORK"

with G-E Photoflash

• G-E Photofloods are swell for out-of-studio work... *but just try G-E Photoflash!* Plenty of light. Crisp, clear detail. Naturalness that sells. And you can carry your lighting equipment in a handbag! By using simultaneous flash from 2 or 3 of the new G-E MAZDA Photoflash lamps, with or without synchronizer, it's easy to get the same artistic lightings you get in your studio. These G-E flash bulbs are *brand new*... "wire" or "foil." They're *safer* . . . New G-E safety-jacketed bulbs. They're *better* ...amazingly uniform timing and a peak for every picture need. And they carry the G-E mark of dependability. Here is a new opportunity to sell pictures. Try it.

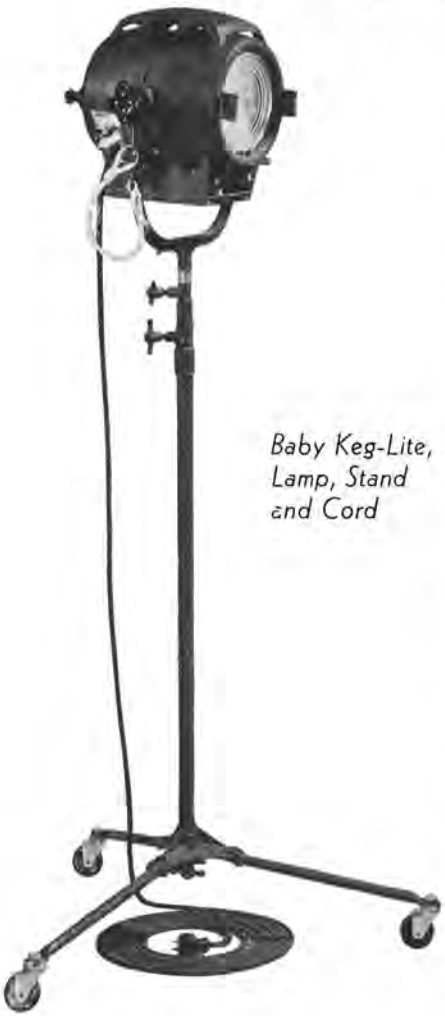
GENERAL ELECTRIC
MAZDA PHOTO LAMPS

FOR BETTER PICTURES

The Baby Keg-Lite

THE product of a leading firm of electrical engineers specializing in the manufacture of lighting equipment for Hollywood motion picture studios, the Baby Keg-Lite brings to the profession a lighting medium of exceptional versatility in portrait, commercial, and illustrative photography.

Baby Keg-Lite Features . . .



Baby Keg-Lite, Lamp, Stand and Cord

INSTANT FOCUSING

A slight pressure on a control conveniently accessible from front or back of the lamp instantly spreads the beam to any desired angle from a 4-degree spot to a 50-degree flood. A calibrated scale, giving focusing arm position, enables you to duplicate any desired lighting effect. With this unique device shadows, colors and light quality may be compared, studied and analyzed in a manner heretofore impossible. This is an exclusive feature.

INTENSITY

The light output of Baby Keg-Lite is *three times* greater than the average photographic light of equal wattage with conventional optics.

LIGHT FIELD

At any degree from spot to flood the field is clear and even.

ADAPTABILITY

Weighing but 25 pounds, Baby Keg-Lite is easily handled. Stand reaches up to eight and one-half feet—has folding castered base. Uses 500- or 750-watt globes—type T-20 or T-24 with medium bipost base.

COLOR

Excellent for color photography.

and Foco Spot

The Foco Spot is an optical accessory which fits in the diffuser clips of the Baby Keg-Lite

ITS purpose is to develop a concentrated beam with sharp edges, either round or rectangular. A revolving disk with several sizes of round apertures will, at a distance of fifteen feet, provide brilliant circles of even light in sizes from 3¾" to 8′ 6" in diameter. Rectangular shapes are obtained by four sliding mats; these rectangles may be rotated to suit the object.

For concentrated highlights, special shadow and silhouette effects, the Foco Spot is an ideal photographic tool.

As an accessory to the Foco Spot, a background slide may be purchased at a slight additional cost. Original designs may be drawn or painted on the glass slides and projected on the background.

Baby Keg-Lite with Foco Spot Attached

Foco Spot

PRICES

BABY KEG-LITE:

Complete with double riser collapsible stand, 25 feet of rubber-covered cable, and plug—without globe – – – – – – – – $55.00

FOCO SPOT ATTACHMENT:

With rotating disk and adjustable mats – – – – – – – – – 25.00

BACKGROUND SLIDE:

With five clear and one heat-proof glass slides – – – – – – – 2.50

MAZDA LAMPS USED IN KEG-LITE

500-Watt T-20 Clear C-13 medium bipost — either 3200°K or C.P. 3380°K – – – – – – net 4.25

750-Watt T-24 Clear C-13 medium bipost — either 3200°K or C.P. 3380°K – – – – – – net 5.50

Extended Payments if Desired or 10% Cash Discount

EASTMAN KODAK STORES

WAR NOT EXPECTED TO CURTAIL EASTMAN PRODUCTION

THE Eastman Kodak Company's manufacturing operations in Rochester are not endangered by any shortage of materials because of war, employees were told last week.

Information posted on bulletin boards in the Eastman plants and office in that city showed that important materials which came largely from Europe in 1914 are now produced in the United States.

"When war broke out in 1914," the bulletin for employees explained, "the Company had to make frantic efforts to accumulate materials from abroad to sustain our manufacturing operations in Rochester. At that time, adequate supplies of the following important materials were available only by importation from Europe:

Paper to be sensitized: mostly from Germany;

Gelatin: mostly from Germany;

Sensitizing dyes for emulsions: from Germany;

Blanc fixe for surfacing paper: mostly from Germany;

Glass for plates: from Belgium and England;

Glass for lenses: mostly from Germany;

Certain developing agents: mostly from Germany;

Synthetic organic chemicals: from Germany.

Persons working in departments where these materials are used will realize how serious any lack of them would be.

"BUT—the war in 1939 finds that situation completely changed: Kodak Park now makes all of its own paper for sensitizing. . . . The gelatin we use in Rochester is now entirely supplied by Kodak Park and the Eastman Gelatine Corporation, Peabody, Massachusetts. . . . The Kodak Research Laboratories now make the sensitizing dyes we need. . . . Blanc fixe is now made at Kodak Park entirely from American materials. . . . Film has very largely superseded glass since 1914 for x-ray, portrait, and commercial photography; but all the glass needed can now be obtained domestically. . . . Increasing amounts of glass for lenses are being made in the United States; and we have on hand a good stock of such foreign optical glass as we do require. . . . Our requirements for photographic developing agents are now supplied entirely by Kodak Park and the Tennessee Eastman Corporation. . . . Kodak Park produces any synthetic organic chemicals we need and also sells organic chemicals to universities and other laboratories.

"THEREFORE—the management is able to inform the employees that our Rochester operations are not endangered by any shortage of materials that can be foreseen as a result of the war."

NEGATIVE ON EASTMAN
PORTRAIT PANCHROMATIC FILM

RETOUCHING SOME OLD ONES

The wife was out of the city and the father was doing his best to care for his two small daughters. One night he left for a dinner party before the children had arrived home and was unable to telephone the house until about midnight. On calling, he said:

"Di, is this you?"

"Yes."

"Is everything all right," the father queried.

"Just fine," was the reply.

"Did you get to bed early?"

"Why, I'm not in bed yet!"

At that the father blew up.

"What! Not in bed? Why your mother would be raving mad if she knew that. What do . . ."

"But I . . ."

"Don't interrupt me," the father yelled. "What do you mean being out of bed at this hour. You get right into bed. Do you hear me?"

"I've been trying to tell you," came the wee voice at the other end of the line. "You've got the wrong number."

•

The foreman of an electrical repair shop was interviewing a bright boy who was applying for a position.

"Do you know anything at all about electrical apparatus?"

"Yes, sir," was the prompt reply.

"What is an armature?" asked the foreman.

"Oh, that's a guy who sings for Major Bowes."

•

Little Rollo was looking at a picture of the martyrs being thrown to the lions. His aunt was telling him all about it in a very solemn effort to impress him with the terror and horror of it all.

"Oh, Auntie!" little Rollo exclaimed, "just look at that poor little lion, 'way behind the others—he won't get any!"

•

"Now boys," said the teacher, "tell me the signs of the Zodiac. You first, Thomas."

"Taurus, the Bull."

"Right! Now you tell another one."

"Cancer, the Crab."

"Right again! And now it is your turn, Albert."

The boy looked puzzled, hesitated a moment, and then blurted out: "Mickey, the Mouse."

Eddy Print Washer

BALANCED water currents and eddies, formed by the design of this washer, give it a remarkable output despite the small diameter of the tank. It is rapid and economical in use.

DIAMETER	CAPACITY	PRICE
12 in.	4 to 5 doz. 5 x 7	$10.00
16 in.	4 to 6 doz. 8 x 10	13.50
22 in.	3 to 4 doz. 11 x 14	18.00

EASTMAN KODAK STORES

The Mount "Hit" at the National Convention

THE PROTECTO EASELS

THREE STYLES—SIZES RANGE FROM 3 X 4 TO 8 X 10

THE unique features of laminated Kodapak to protect the card and design—the acetate sheeting for protecting the print—the easel-lock and the optional use of a special-made delivery envelope will, we know, appeal to you as a sales producer. And your customers will appreciate the opportunity of giving a well-made, protected portrait to their friends.

As an Introductory Offer, we will send samples of the three styles in the 3 x 4 size for 20 cents.

Ask for Offer No. 16

And do this today! For the Protecto Easels can and will produce business for you this season—they have that "something new" to talk about.

EASTMAN KODAK COMPANY
(TAPRELL, LOOMIS DIVISION) CHICAGO, ILLINOIS

For Clean Negatives and Prints . . . Fulflo Filters

MODEL WS

IF you want a clean water supply for your tanks, print washers and trays—the best protection from scratched negatives and spotty prints—install a Fulflo Filter. It removes all dirt and sediment from the water, eliminates the trouble and expense of swabbing and scrubbing and makes your work faster, surer.

The Fulflo Filter is easily and quickly connected prior to the water outlet. Operation is entirely automatic. It ends, once and for all, the hazards of ruined pictures due to impurities in the water.

Standard models of Fulflo Filters, with capacities up to 10 and 4 gallons per minute, meet all photographic requirements. Honeycomb Filter Tubes, as listed below, are unusually low in cost, take less than a minute to replace. The higher numbered filters have a finer mesh and filter out more foreign matter from the water. Those marked with an asterisk are best adapted for general photographic use.

PRICES

8″ Model WS Fulflo Filter, 10-gallon capacity	$18.00
4″ Model WM Fulflo Filter, 4-gallon capacity	10.00

REFILLS:

No. *1216, 4″	.30
No. *1522, 4″	.35
No. 1129, 8″	.50
No. 1334, 8″	.50
No. *1541, 8″	.55
No. 1953, 8″	.55

EASTMAN KODAK STORES

New...

HEAVY DUTY SQUEEGEE PLATES

A SQUEEGEE plate of radically new construction is now available to replace the present plates.

The new plates, with proper care, yield longer service and better results.

The improved characteristics result from a new coating method and material. The metal stock is covered first with a waterproofing bond to prevent peeling and rust. A clean, hard, shiny enamel finish is then applied. Mottled surfaces on prints, caused either by the absorption of moisture by the enamel or by "pimples," are thus eliminated. Special care is taken to bond the edges of the coating.

Tests prove that moisture does not cause the new ferrotype layers to blister, and that they do not peel in the heat of tropical countries.

To clean the plates, warm water and good soap are advisable, and when the plates are cleaned thoroughly, the prints should not stick. A solution of 10 grains of paraffin in 1 ounce of benzol is useful as a ferrotype polish. (This solution and its vapor are highly inflammable; the vapor in concentration is toxic if inhaled.)

Because of the flexibility of the new surface, accidental kinks do not produce peeling of the layers.

The new plates correspond in weight to the "heavy" old style plates, and are supplied in 10 x 14, 14 x 20, and 18 x 24-inch sizes, with round corners only. Orders should specify "Heavy Duty" if the new plates are desired; otherwise the old style plates will be shipped. Prices are:

	10 x 14	14 x 20	18 x 24
Each	$ .35	$ .70	$ 1.10
½ dozen	1.50	3.50	5.50
Dozen	2.50	6.25	10.00
Case of:			
100	18.00	45.00	
60			45.00

» » ● « «

NEW GRADES OF KODABROM

IN addition to the grades of Kodabrom Paper previously supplied, the following are also available:

In Single Weight, Grade A, semi-matte, natural white; and E, smooth, semi-matte, white. Both A and E are furnished in Contrasts 1, 2, 3, and 4.

In Double Weight, Grade R, medium rough, lustre, natural white; and S, medium rough, lustre, old ivory. Grades R and S are available in Contrasts 1, 2 and 3.

These new papers will be furnished in the same sizes and at the same prices as other grades of Single and Double Weight Kodabrom.

Three-in-One Commercial Lens

Cooke Convertible Anastigmat *F* 6.8

Combined Lens 12¼" *equivalent focus—full aperture f*/6.8
Back combination 19" *equivalent focus—full aperture f*/12.5
Front combination 26½" *equivalent focus—full aperture f*/16

THE photographer will find this lens not only most convenient to use, but also superior in optical qualities to the older types of Convertible Lenses.

Both the front and rear combinations are, individually, complete optical units—giving perfect definition over the field they are designed to cover.

The front element is unscrewed when the back is used alone, and the back is unscrewed when using the front, but either one when used alone should be screwed behind the iris diaphragm.

All combinations will cover 8 x 10 at infinity.

Price, mounted in Ilex Universal Shutter - - - - - - $230.00
Price, mounted in barrel, with Iris Diaphragm - - - - - 226.75

Available on Ten Days' Trial

EASTMAN KODAK STORES

PLAN NOW FOR YOUR HOLIDAY BUSINESS

THE President has decided that Thanksgiving should come a week earlier than usual this year to make the space between this holiday and Christmas a bit longer. True, it disarranged football schedules which, of necessity, are made a year in advance, but it should be good for merchants and photographers, for it gives 26 shopping days between Thanksgiving and Christmas instead of 20, as would have been the case had the change not been made.

Thanksgiving is usually a homecoming time in many American families, and it should be an opportunity for you to promote the idea of family groups. Photographers in the smaller towns should be able to interest families they know in having group pictures made in the home, especially when it is known that there is to be a family reunion.

Christmas business, of course, is what you really expect in big volume, and it is about this that you are most concerned. You should begin your Christmas advertising immediately after Thanksgiving. Everyone knows you can't shop for photographs the day before Christmas, so early advertising is logical. Get people into your studio as early as possible so the last week's rush will be relieved.

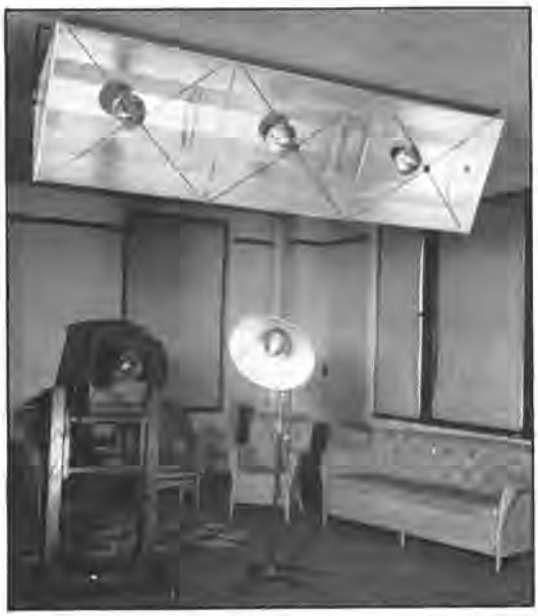
There is no denying the fact that efficient business methods will permit you to produce a greater amount of finished work when you reach that last ten-day period. You have probably had the experience of buying some unusual article in a merchant's store a few days before Christmas. If you managed to get it you were fortunate, for practically every merchant discontinues certain lines of goods in December to make way for fast-selling gift items. He can't be bothered with things for which there is only a small demand.

How many styles of portraits do you make, and how many styles of samples must you have to sell all of the styles you make? How much mount and paper stock must you carry in order to be sure of a supply of all styles and sizes to carry you through December without last minute reorders?

These are questions worth careful thought. If you discontinue all unusual styles and sizes which require special mounts, special cutting of paper, special masking or vignetting, sepia toning, or other special operations, you will be able to put a greater volume of work through your finishing department. You will be able to get more work out when promised, with less overtime, fewer mistakes, better satisfied customers, and a greater profit for yourself.

Call your printer into consultation and learn from him what styles of work slow up production. He will be glad to co-operate with you and will welcome any plan which relieves him of working overtime at this season. By adopting such a plan of standardizing styles and sizes you can handle a larger volume of December business and keep your deliveries on schedule right up to the last day before Christmas.

For Well Balanced Studio Lighting



Overhead Indirect Flood Ventlite

●

Studio Modeling Ventlite

THE lights illustrated provide illumination in that efficient, modern manner which leads to better pictures.

The *Overhead Indirect Flood Ventlite* consists of three or more etched aluminum reflectors, 36″ x 30″ x 14½″ deep . . . one is recommended for about every four feet of studio width. The end sections have adjustable hangers for various ceiling heights and may be tilted. Ideal height is 10 feet, but as low as 8½ feet is satisfactory.

Suspended from the ceiling, the installation being either fixed or movable, a diffused floodlight covers the entire operating area. Telescopic socket housings properly locate any pear-shaped Mazda Lamp, and deflectors render indirect, reflected light. Tracing cloth or other diffusing material can be placed over the entire light opening.

The *Studio Ventlite* is an ideal complement, providing the necessary high-light relief. It yields intense, directional light over a 4-foot area. The swivel-supported reflector permits full modeling control and a deflector cuts off harsh rays. Mazda Lamps from 300 to 1500 watts are accommodated, as well as the No. 4 Photoflood and 2000-watt Movieflood Lamp.

Overhead Indirect Flood Ventlites, Three Sections, complete with two ends, hangers, telescopic socket housings, 6-foot cords, and deflectors. Total weight, 45 lbs.	$125.00
Center Sections, each	38.00
Ends Only with Hangers	5.50
Studio Ventlite, with stand deflector and 20-foot flexible cord	55.50
Silk Screen for Studio Ventlite	5.00

Extended Payments if Desired or 10% *Cash Discount*

EASTMAN KODAK STORES

NEGATIVE CONTRAST FOR THE BEST PRINT QUALITY

THE printing contrast of a negative is very important because the finest prints are made on chloride papers such as Vitava Athena, or chloro-bromide papers such as Vitava Opal, or Illustrators' Special, and these papers are not made in a variety of contrasts. Even when papers supplied in various degrees of contrast are used, negatives of a standard normal contrast will always produce the best prints.

The printing contrast of a negative depends upon a number of factors. The brightness range of a scene determines contrast, whether it be a landscape or architectural subject, or a lighting effect created in a studio. You may have wondered how the architectural photographer produces such strikingly brilliant effects in his pictures when he is unable to control the light. The answer is that he studies the light on a building, sometimes for days, and when the light is just right he is there to make his picture. And quite often the lighting of an architectural detail is controlled by reflected light, to reduce contrast.

Correct contrast in a studio lighting is controlled by the reflecting power of the objects photographed and by the differences in the illumination of the various objects in the picture. The highlights in the picture must bear a definite ratio to the shadows to produce a contrast range that can be correctly reproduced in the negative and the print.

If the contrast range of the lighting is too low, with a standard negative-making material the negative will be flat. As a result, the print which correctly reproduces the highest light will not give a black shadow.

On the other hand, if the contrast range of the lighting is too high the negative will have too much contrast. As a result, the print which reproduces highlight detail will lose detail in halftones and shadows at the other end of the scale.

Exposure also has its effect upon contrast. A negative which is underexposed is lower in contrast as well as in density than a fully exposed negative. A negative which is greatly overexposed is also lower than normal in contrast but higher in density.

The inherent contrast of the emulsion is also an important factor in governing contrast of the negative. Eastman negative materials cover a wide range, from low contrast Portrait Panchromatic, Super-XX, and Tri-X Films, through higher contrast materials such as Super Panchro Press and Super Ortho Press Films to high contrast Eastman Process Films, intended to yield black-and-white negatives, lacking in intermediate tones.

The composition of a developer has a marked effect upon contrast. Strong developers such as D-19 can produce negatives of much higher contrast than more slowly working developers such as D-76.

(Continued over the page)

NEGATIVE CONTRAST FOR THE BEST PRINT QUALITY

(Continued from preceding page)

Temperature of the developer is another factor. Negative contrast for a given development time increases with increase in temperature, up to a point where fogging begins to reduce contrast.

Time of development is another important factor in controlling contrast. Negative contrast increases over a wide range with increase in development time. Variation of development time is the most satisfactory method of controlling negative contrast for a given subject, negative material, and developer. Agitation of the solution during development increases the rate of development, causing increased contrast for a given development time.

All of these factors might seem to make the subject of contrast extremely complicated, but this is not true if methods of working are standardized. A standard negative material, normal exposure, the recommended developer at normal temperature, with a standard time of development, should produce a good negative. If contrast is too high or too low, increase or reduce the time of development. If the contrast is still unsatisfactory, especially in studio work, it is quite certain that there is not the correct balance of light. The highlights are too strong or shadow illumination is too weak.

If one uses a paper made in five degrees of contrast it is always best to make negatives to fit the grade midway in the contrast range. To be sure your negatives fit, make prints on several contrasts of paper. If prints are best on a low contrast paper, develop your negatives less. If they are best on a high contrast paper, develop them more. If you use a paper that is supplied in only one grade, make three negatives, alike in exposure. Develop one slightly less than is your custom, one normal, and one more than normal. You will have the same negative in three degrees of contrast. The one which makes the best print indicates the time of development which will give you the best negatives for the paper you use.

Majestic Light-Proof Ventilator

THIS ventilator provides fresh air in the darkroom. Its construction allows for free passage of air but keeps out light. Constant air circulation is assured without bother as no adjustments are necessary.

It is strongly made and is easily installed in any door or partition.

Size, 12 x 24 x 1 inch - - - - - - - - - - - - - - - - - - $5.50

EASTMAN KODAK STORES

Photo Colors

KODAK TRANSPARENT OIL COLORS

MADE especially for coloring portraits or commercial photographs, they do not require the use of sizing except for glossy prints. The colors, which are ground extremely fine and therefore apply very smoothly, will not bleach or otherwise injure the photographic image and have great permanency.

Furnished with all needed accessories in a 15- and an 8-tube color assortment, as well as in a set of 15 tubes of color only; each with instruction book.

Kodak Transparent Oil Color Outfit	$3.75
8-tube Kodak Transparent Oil Color Outfit	2.00
Set of 15 tubes in carton	2.60
Extra tubes ¾" x 4"	.60
Extra tubes ½" x 2"	.20

VELOX WATER COLOR OUTFIT

PHOTOGRAPHS and lantern slides can be colored easily with them. Outfit consists of three brushes and instruction book with 12 leaves of different colors and case. Each leaf is divided into 26 detachable, soluble color stamps. Inside cover of case serves as mixing palette.

Velox Water Color Outfit	$1.00
Velox Water Color Stamps, complete book of 12 colors	.50

OTHER PHOTOGRAPHIC COLORS

Webster Photo Colors

Set of 14 ½-oz. bottles of liquid colors and Dye Proofing (protects parts of photographs against subsequent washes)	$3.50

Roehrig's Transparent Oil Photo Colors

Set of 14—¾ x 4-inch, complete with accessories	7.80
Set of 15 small tubes and accessories	4.00
Set of 15 small tubes only	2.75

COMMERCIAL ADVERTISING BY DIRECT MAIL

THE commercial photographer is a bit handicapped in advertising because the demand for commercial photography is not general. He can not very well advertise in newspapers because too few readers are prospective customers. The same applies to trade papers, because they do not have general coverage.

How, then, is the commercial photographer to advertise?

Direct solicitation is the best possible means of getting business. Show the prospective customer a fine line of samples, and give him well thought-out arguments for the use of photographs in his sales promotion. You may not land an order but you have made a good contact.

Make as many such contacts as possible and then follow them up with direct mail advertising. This is your big opportunity to keep photography before prospective users of photographs.

Whatever your mailing piece may be, it must be photographic, for you can't expect others to use photography in promoting their business if you don't use photographs yourself.

Plan to mail a monthly advertising piece to a carefully selected list of prospects. It should be in the form of a calendar, or a blotter, or a combination of both, and it should be as fine a piece of work as you can produce. If it isn't good photography it won't get business.

Make each advertising piece simple and attractive—the month's calendar, a good picture, and an advertising line such as: "One picture is worth a thousand words," or "Let photographs tell your sales story," and then your firm signature.

Have a good commercial artist make a layout for each piece, giving the photograph preferred space. From the art work, with photograph mounted in place, make the finest possible negative, and the best prints you know how to make. The important thing, however, is the picture. For the first mailing piece you should use the most attractive, most startling, or most unusual picture you have ever made. It must be something that will get immediate attention or the pieces to follow may go into the wastebasket. As a rule, however, this is not the fate of photographs if they are at all good since they impart a sense of value.

It is very important in such advertising that each new picture should be of an entirely different nature. Each month's appeal should be directed at a different class of prospects, making the twelve pictures for the year cover as many uses of photography as possible.

Two things are essential to the success of such advertising. If you start it, you must keep it up for at least a year. And it must reach your customers on exactly the same day each month. This promptness is especially important, as prospects will come to look for it and that is an indication it is effective. When a photographer is needed, you will most likely be the man called.

Plan such a direct mail campaign beginning January, 1940.

NEGATIVE ON EASTMAN
PORTRAIT PANCHROMATIC FILM

No. 453 Assortment Features

No. 453 ASSORTMENT CONTAINS:

Thirty rolls of Kodak Super-XX Film as listed below...six Snapshots-at-Night Kits...and Counter Displayer (illustrated above) which holds three of the Kits at one time and takes up but 10½ x 11 inches of counter space. Snapshots-at-Night Kits each contain two Kodak Handy Reflectors, Model C (15c a pair, retail), one No. 1 (20c retail) and one No. 2 (40c retail) Mazda Photoflood Lamp—for a unit value of 75c. This price does not include the Kodak Super-XX Film which the clerk adds and charges for at the time of sale.

6 rolls No. XX 127 (Super-XX) Kodak Film @ 30c	$ 1.80
6 rolls No. XX120 (Super-XX) Kodak Film @ 35c	2.10
6 rolls No. XX620 (Super-XX) Kodak Film @ 35c	2.10
6 rolls No. XX116 (Super-XX) Kodak Film @ 40c	2.40
6 rolls No. XX616 (Super-XX) Kodak Film @ 40c	2.40
6 No. 1 Mazda Photoflood Lamps @ 20c	1.20
6 No. 2 Mazda Photoflood Lamps @ 40c	2.40
6 pairs Kodak Handy Reflectors, Model C, @ 15c a pair	.90
Total retail value	$15.30
Suggested dealer-jobber's resale price	10.20

No charge for 25 Snapshots-at-Night Instruction Leaflets or Counter Displayer.

HIGH SPEED EASTMAN FILM

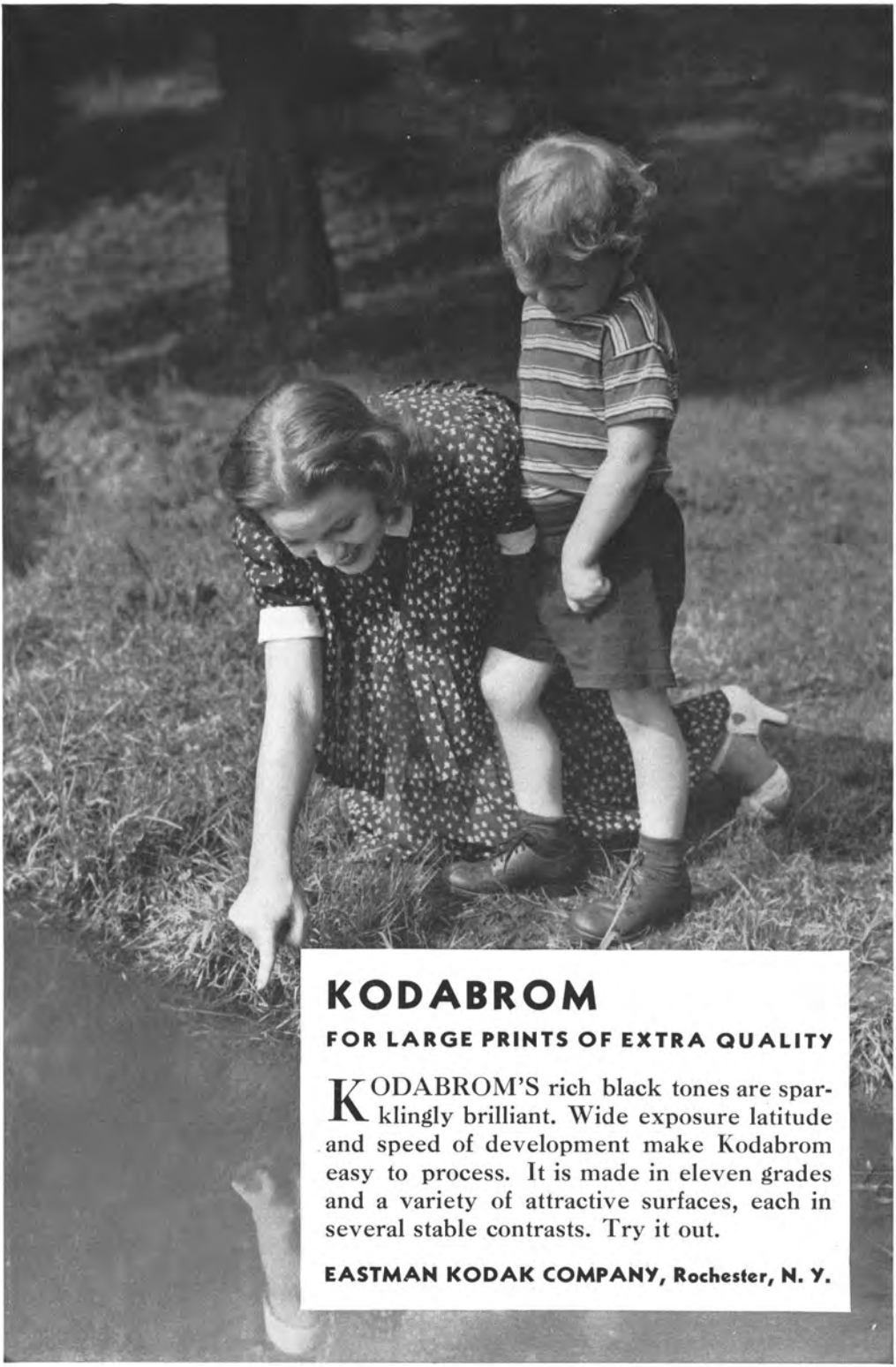
FOR SNAPSHOTS AT NIGHT

Sensationally fast Kodak Super-XX Film and new Snapshots-at-Night Kits already in big demand. Order at once.

KODAK SUPER-XX FILM—about four times as fast as ordinary film—is big news for picture takers. Snapshooting at night reaches new heights of ease and certainty, with any camera that takes this new film—even an inexpensive Brownie. A vigorous Eastman national advertising campaign is building up a powerful demand for Kodak Super-XX Film and Snapshots-at-Night Kits—and that means today is none too early to order your No. 453 Snapshots-at-Night Assortments. Details at left.

Order Now from Your Usual Source of Eastman Supplies

EASTMAN KODAK COMPANY, Rochester, N. Y.



KODABROM

FOR LARGE PRINTS OF EXTRA QUALITY

KODABROM'S rich black tones are sparklingly brilliant. Wide exposure latitude and speed of development make Kodabrom easy to process. It is made in eleven grades and a variety of attractive surfaces, each in several stable contrasts. Try it out.

EASTMAN KODAK COMPANY, Rochester, N. Y.

BETTER PRINTS

MAKE BETTER SALES

QUALITY in your portraits depends upon the ability of the print to reproduce the quality of your negatives. The majority of photographers use Vitava Opal because it reproduces the finest gradations of light and shade in rich and brilliant prints, with pleasing warmth of tone. Eastman Kodak Company, Rochester, N. Y.

VITAVA OPAL PAPER

FOR ENLARGEMENTS OF CONTACT PRINT QUALITY

TRI-X PANCHROMATIC

SOLVES THE SPEED-QUALITY PROBLEM

SPEED alone is not enough in modern commercial and illustrative photography. There must also be depth, gradation, modeling, fine rendering of flesh tones. Tri-X Panchromatic gives you speed plus these qualities. The unretouched illustration above is from an 8 x 10 negative, made with 14-inch Ektar lens, *f*/16, 1/75 second, with front illumination of only 2 No. 1 Photofloods. Eastman Kodak Company, Rochester, N. Y.

TRI-X PANCHROMATIC

FOR EXTREME SPEED PLUS QUALITY

Use Tested Chemicals

BY using chemicals of certain strength and purity, most of your processing troubles will be avoided. That's why Eastman Tested Chemicals, manufactured under laboratory control, are recommended in all Eastman formulas. It's worth your while to be sure. Eastman Kodak Company, Rochester, N. Y.

Specify

EASTMAN **TESTED CHEMICALS**